

REMARKS

Claims 2-6, 10, 11, 15, 19-21, and 28-31 are pending in this application.

The Office Action dated November 17, 2005, has been received and carefully reviewed. In that Office Action, claims 20 and 30 were objected to because the phrase "light-emitting devices" lacked antecedent basis. The examiner indicated that both claims were treated as if they recited "light emitting diodes," and by the above amendment, claims 20 and 30 have been amended to be consistent with that interpretation. Because the claims are being amended only to make them consistent with the claim language already considered by the examiner, it is not believed that the above amendments raise any new issues that would require further consideration or search, and the entry of these amendments is respectfully requested.

Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Olczak. In addition, claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Kishimoto, and claims 4, 10, 19/3, 19/4, 20, 21, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Kishimoto and further in view of Yoshiyama. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Lebens, and claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Gudenburr, Kishimoto and Yoshiyama and further in view of Lu. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Kishimoto and further in view of Gudenburr, and claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Fujii. Reconsideration and allowance of the pending claims is respectfully requested in view of the following remarks.

REJECTIONS UNDER 35 U.S.C. 102(e)

Claim 28 is rejected under 35 U.S.C. 102(e) as being anticipated by Olczak. Claim 28 requires, *inter alia*, a light emission control device connected to a power supply device and a tubeless electronic flash for supplying electric charge to at least one light emitting diode for causing the tubeless electronic flash to illuminate an object to be photographed in synchronism

with a shutter. Olczak does not disclose a shutter or explain how a light is controlled to illuminate an object in synchronism with a shutter as required by claim 28. Olczak is directed to “infrared illumination systems for digital infrared cameras used for example in surveillance, machine vision, and microscopy to image objects having spectrally reflecting surfaces.” The illumination system in Olczak, therefore, appears to be of the type used for continuous illumination rather than for flash photography. Because Olczak does not show at least the above limitation required by claim 28, it is respectfully submitted that claim 28 is not anticipated by Olczak, and the withdrawal of the rejection of claim 28 as being anticipated by Olczak is respectfully requested.

Claims 5, 6, 15 and 29 depend from claim 28 and are submitted to be allowable for the same reasons as claim 28.

REJECTIONS UNDER 35 U.S.C. 103(a)

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Kishimoto. Claim 2 requires a tubeless electronic flash mountable on or in a portable camera and comprising at least one light emitting diode, wherein the at least one light emitting diode comprises R, G and B light emitting diodes. The Office Action acknowledges that Olczak does not show or suggest the use of red, green and blue LED's. Kishimoto is cited to show a lighting device that includes red, green and blue LED's. It is respectfully submitted that a proper motivation for combining Olczak and Kishimoto has not been provided and that therefore a *prima facie* case of obviousness has not been presented in connection with claim 2.

The Office Action suggests that an advantage of using red, green and blue LED's is that “illuminance non-uniformity can be corrected.” However, Kishimoto does not include such a teaching. Instead, Kishimoto discloses at column 14, lines 4-27, that illuminance non-uniformity may result from using 3x3 arrays of RGB LED's as illustrated in Figure 15. To address this non-uniformity, Kishimoto suggests the structure of Figure 20 which includes several LED's mounted behind a prism. Thus, Kishimoto suggests that a first arrangement of RGB LED's may cause a problem and that the problem can be addressed by a second arrangement of RGB LED's. Kishimoto, however, in no manner suggests that an LED of a single color be replaced with RGB

LED's to address illuminance non-uniformity issues. It is therefore respectfully submitted that nothing in Kishimoto or the art of record suggests replacing Olczak's LED's with RGB LED's as suggested in the Office Action and that claim 2 patentably distinguishes over the references of record.

Claims 3, 4, 10, 11, 19, 20, 21, 30 and 31 depend from claim 2 and are submitted to be allowable for at least the same reasons as claim 2.

Claims 4, 10, 19/3, 19/4, 20, 21, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Kishimoto and further in view of Yoshiyama. As argued above in connection with claim 2, it is submitted that a proper motivation for combining Olczak and Kishimoto has not been provided. Claims 4, 10, 19/3, 19/4, 20, 21, 30 and 31 are therefore submitted to be allowable over the references of record for the same reasons as claim 2.

Claim 5 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Lebens. Claim 5 depends from claim 28. Lebens does not address the shortcomings of Olczak discussed above in connection with claim 28. Claim 5 is therefore submitted to be allowable for at least the same reasons as claim 28.

Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Gudenburr. Claim 6 depends from claim 28. Gudenburr does not address the shortcomings of Olczak discussed above in connection with claim 28. Claim 6 is therefore submitted to be allowable for at least the same reasons as claim 28.

Claim 11 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Kishimoto and Yoshiyama and further in view of Lu. As argued above in connection with claim 2, it is submitted that a proper motivation for combining Olczak and Kishimoto has not been provided. Claim 11 is therefore submitted to be allowable over the art of record for at least the same reasons as claim 2.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Kishimoto and further in view of Gudenburr. As argued above in connection with claim 2, it is submitted that a proper motivation for combining Olczak and Kishimoto has not been provided. Claim 15 is therefore submitted to be allowable over the art of record for at least the same reasons as claim 2.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olczak in view of Fujii. Fujii does not address the shortcomings of Olczak discussed above in connection with the rejection of claim 28, and claim 29 is therefore submitted to be allowable for the same reasons as claim 28.

Claim 29 further distinguishes over the art of record by requiring that the power supply device comprise a booster device which boosts output voltage of a battery and a capacitor with large capacity that is charged by the voltage boosted by the booster device, and that the light emission control device supply the electric energy from the capacitor to the light emitting diodes. The Office Action acknowledges that this limitation is not shown or suggested by Olczak. However, Fujii is cited to show this limitation. It is respectfully submitted that a proper motivation for combining these references has not been provided, that a *prima facie* case of obviousness has not been provided, and that claim 29 therefore further distinguishes over the art of record.

Fujii allegedly discloses a booster as claimed. It is stated in the Office Action that an advantage of a booster is that a large amount of charge can be stored to quickly and brightly induce a flash. This large amount of charge may be required to power a xenon discharge tube such as the one used in Fujii. However, nothing in the art of record suggests that such a large amount of charge would be required to power LED's. It is therefore respectfully submitted that nothing in Fujii or the other art of record suggests providing the LED device of Olczak with a booster for a xenon discharge tube. Claim 29 further distinguishes over the art of record for this reason.

CONCLUSION

Each issue raised in the Office Action dated November 17, 2005, has been addressed, and it is believed that claims 2-6, 10, 11, 15, 19-21, 28 and 29-31 are in condition for allowance. Wherefore, reconsideration and allowance of these claims is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Scott Wakeman (Reg. No. 37,750)

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at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.


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Respectfully submitted,

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